

# Personality Factors as Correlates of Perceived Quality of Life among Adolescents with Hearing Impairment in Selected Secondary Schools in Lagos State, Nigeria

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## Abstract

This study investigated personality factors that predict perceived quality of life among adolescents with hearing impairment in selected secondary schools in Lagos state, Nigeria. Seventy five adolescents with hearing impairment participated in the study. The participants were drawn from four special secondary schools meant for students with hearing impairment. Three (3) research questions were generated for the study. The Rosenberg self-esteem Scale, World Health Organization (WHO) Quality of life scale and the Washington University School of medicine quality of life questionnaire for adolescents were used for data collection. Data generated was analysed using descriptive statistics and inferential statistics. The study revealed a composite influence of independent variable-personality factors (self esteem, gender and onset of hearing loss) accounted for 14% of variation on the perceived quality of life among adolescents with hearing impairment. The study also found that the onset of hearing loss has significant relative influence on perceived quality of life among adolescents with hearing impairment ( $\beta = -0.275$ ;  $t = -2.429$ ;  $p < 0.05$ ) but gender has no significant relative influence on perceived quality of life among adolescents with hearing impairment ( $\beta = 0.004$ ;  $t = 0.036$ ;  $p > 0.05$ ). Based on the findings, it is recommended that it is recommended that parents should report to professionals in the field of special education or those in medical the birth emergence or the development of any sudden hearing problem to any of their wards/children for early intervention programmes formulated for such a child to minimize the effect and burden which the hearing impairment placed on the shoulder of the person suffering from it. The curriculum developer should bear in mind the presence of hearing impaired in all our schools and so should develop curriculum that is hearing impaired friendly.

**Keywords:** Hearing impairment, quality of life, adolescents.

## 1. Introduction

Adjusting to hearing impairment and accepting hearing loss can be difficult for many individuals, as well as for their families. The most significant consequence of growing up with hearing loss is the difficulty in perceiving others, and this limitation has direct effect on the ability to develop speech and language skills which is the essential for communication. When language development is delayed, Heward (2000) observed that there is a cascading effect on every aspect of a child's psychosocial development, self esteem, self efficacy, emotional development, family concern, social competence and over all perceived quality of life of the hearing impaired person. Studies revealed that children with hearing impairment present more behavioral and social problems than their hearing peer (Davis & Hind, 1999; Oyewumi, 2012). The Quality of Life concept is important to understanding children and youth with hearing loss because of the importance of Communication and social participation in everyday life. Quality of Life is conceptualized as a broad assessment of well-being across various domains. However, Quality of Life is a broad concept and there seems to be no consensus on its definition nor measurement (Hallberg, Ringdahl, Holmes, & Carver, 2005; Moons, Budts, & De Geest, 2006; Skevington, Lotfy, Mauze & O'Connell, 2004). In essence, Quality of Life is about the meaning that people attribute to and derive from the important aspects of their life; thus it is a social construction and highly individualized.

Time span for adolescence is not usually uniform to every person because some individual attain it earlier than others (Ademokoya and Oyewumi, 2004). Some of the personality factors that are known to influence the quality of life of adolescents with hearing loss which are of interest in this study are the self esteem, onset of hearing loss and gender. Adolescence is a life stage with rapid and major developmental changes, yet little is known about how these changes influence the quality of life (QoL) of young people who are deaf or hard-of-hearing. Adolescents spend more time with their peers, who serve as a reflection of their self-worth, and play a crucial role in their emotional development. The driving force behind social development and quality of life in adolescence is the ability to establish close friendships, to participate in social interactions, and to establish independence.

Onset of hearing loss, intelligent quotient, his/her parental disposition and attitude towards his/her disability, age at which he/she begins schooling, type of school he/she attends, his/her personality and sequence of biological changes would in no small measure made adolescents hearing impairment experience and behaviour vary from their hearing counterparts. Moreover, both the adolescents with hearing impairment and their hearing counterparts may also not go through adolescence period with the same coping mechanism. Language is central in human communication, but it is often taken for granted until a breakdown in communication occurs. For hearing impaired adolescents, language moves to center stage and becomes pivotal in the socialization process (Scheetz, 2004). The ability to ask questions, request clarification, respond appropriately to requests, and the ability to choose appropriate strategies when communication breakdowns occur, is essential communication skills. Adolescents with hearing loss who have acquired sophisticated use of language have an increased chance of being accepted by their hearing peers and develop high good quality of life (Scheetz, 2004).

On the other hand, for those adolescents with hearing impairment whose language skills lack proficiency, social interactions may become a frustrating struggle, leading to social isolation and loneliness and low poor quality of life. An individual uses language to describe, interpret, and ultimately understand the abstract nature of his her emotions. As a result of concomitant language deficits, hearing impaired adolescent growing up with hearing loss may have limited experience in self expression and a subsequent delay in awareness and understanding of their emotions, as well as the emotions of others (Stein, Gill, and Gans, 2000).

Eleweke (1997) noted that adolescents with hearing impairment are often less accurate in identifying others emotional states than those without hearing impairment and have a poorer understanding of affective (feeling) words. Understanding affective vocabulary has been positively related to personal adjustment. The adolescence years present new challenges and heighten the intensity of existing ones. Adolescence is a stage of life with important developmental tasks, including peer group affiliation, identity formation, occupational preparation, and adjustment to physiologic changes (Altman, 1996). During these turbulent times, self consciousness increases, as well as uncertainty and mood swings. All teens, with or without hearing impairment, may feel besieged with emotions that they find hard to articulate, and the presence of hearing impairment can exacerbate teens' struggles for self awareness, and self expressions which will ultimately build and have great impact in their quality of life: the meaning that people attribute to and derive from the important aspects of their life.

Positive self-esteem is important for successful functioning in everyday life. The self-evaluation of members of minority groups such as that of adolescents with hearing impairment is challenged by prejudice toward them on the part of the majority society. Nevertheless, the literature that focuses on the self-esteem and perceived quality of life of individuals with hearing impairment shows that there is considerable variation within the Deaf community (Bat-Chava, 1993; Crowe, 2000). While some studies report lower self-esteem and quality of life among hearing impaired people than among hearing individuals (Bat-Chava, 1994; Schlesinger, 2000), other studies demonstrate that prejudice does not inevitably lead to lower self-esteem and perceived quality of life (Bat-Chava, 2000; Emerton, 1996; Crowe, 2000). Individuals are not born with their self esteem intact; rather, self esteem is learned by absorbing the input, feedback, and reactions from those around us (Murphy & Parker, et al., 2008). Children typically internalize such reactions without questions and allow others attitude to define themselves to themselves but adolescent however do otherwise because they have come of age to differentiate positive reactions from negative ones.

Bat-Chava (1994) noted that type of school have a great influence on the perceived quality of life of adolescents with hearing impairment. Hearing impaired children can be placed in different educational environments that can be ordered along a continuum from residential schools for students with hearing impairment to full mainstreaming with oral education. It is likely that those hearing impaired individuals who attended residential schools where all the other students are deaf and American Sign Language is the primary mode of communication will tend to have good quality of life. In residential schools, children learn and socialize in an environment that fosters the acceptance of deafness instead of treating it as a deficiency. Furthermore, these hearing impaired students do not have to face negative attitudes from hearing students during their everyday

lives that might also protect and enhance their quality of life (Bat-Chava, 1994, 2000; Schirmer, 2001). Nevertheless, the number of children with hearing impairment receiving instruction in general education environments has been increasing over the past two decades.

Recent research shows that attending schools with mostly hearing students, while having the opportunity to interact with other hearing impaired students, is beneficial since it gives deaf children the chance to learn how to function in the hearing world (Kluwin, 1999, Luckner, 1999). However, there is also some evidence that separate special education throughout elementary school is beneficial for the social and academic achievement of children with hearing impairment during their secondary and post-secondary schools years (Geers, 1990). Ideally, inclusion would teach children with hearing impairment to function well in both the hearing and the Deaf communities, and ultimately brings about good quality of life. However, in their formative years children having hearing impairment are likely to benefit psychologically and develop good quality of life most from being in residential schools where they are among similar others and are able to fully communicate and share experiences (Burton and Mauze, 2007).

Hearing impairment acquired in adulthood creates problems that are different from the problems of those who were born with impaired hearing or who lost their hearing during their early childhood (Munoz-Baell & Ruiz, 2000). Congenital hearing impairment is more of a linguistic problem since these hearing impaired people most often do not learn any spoken language properly. Communication disability, in turn, may lead to social rejection, little education, low-status jobs and low income can have an important impact on perceived quality of life (Strong & Shaver, 1991).

On the other hand, later-deafened individuals usually have other kinds of issues with perceived quality of life (Schirmer, 2001). Theirs is a sensory-neural impairment that is acquired post-lingually or after they have already learned the language and the values and norms of the hearing community (Crowe, 2000). Their problems derive from the fact that their hearing loss significantly changes their lives. They have to learn to adjust and adopt to new communication strategies and often to an entirely different lifestyle. They have to establish a new identity, recreate their already existing social relationships, learn to rely more on their other senses, and face the fact that they cannot hear the voices and sounds of the world any more. Gender is considered by many to be a cultural phenomenon (Peplau, Veniegas, Taylor, & DeBro, 1999; Wade & Tavis, 1999).

Gender, according to Wade and Tavis (1999), is described as “all the duties, rights, and behaviors a culture considers appropriate for males and females. Gender, is generally reported to impact upon the growth, demonstration and manifestation of perceived quality of life. SarAbadani-Tafreshi (2006) studied perceived quality of life and gender among students and concluded that there is a significant difference in perceived quality of life between males and females. Studies on Quality of life among adolescents with hearing impairment are relatively scarce. Therefore, this study set out to investigate some personality factors that can determine perceived quality of adolescents with hearing impairment in selected schools for the hearing impaired in Lagos state, Nigeria.

### **Purpose of the study**

The purpose of this study is to;

- Examine the quality of life of the adolescents with hearing impairment.
- Identify and analyze links between self esteem, gender, onset of hearing loss and perceived quality of life among adolescents with hearing impairment.

### **Research Questions**

- What is the relationship among the independent variables (self esteem, onset of hearing loss and gender) and the dependent variable (perceived quality of life among adolescents with hearing impairment)?
- What is the composite influence of the independent variables (self esteem, onset of hearing loss and gender) on the dependent variables (perceived quality of life among adolescents with hearing impairment)?
- What is the relative influence of the independent variables (self esteem, onset of hearing loss and gender) on the dependent variable (perceived quality of life among adolescents with hearing impairment)?

### **Research Methodology**

This study adopted descriptive survey research design of expo-facto type because it only investigates the existing independent variables and how they correlate to dependent variable without manipulation.

## Participants

The sample for the study comprised 75 SS 1 and SS 2 students drawn from 4 secondary schools in Lagos state, Nigeria. The participants were selected using purposive sampling technique.

## Description of instrument

The instrument for this study consists of four sections, namely; section A, B, C and D. Section A comprises Bio-Data/Demography details of the respondents/participants. Section B is Rosenberg Self-Esteem Scale to see how the respondents will respond to the ten items questions in the scale to measure their self esteem by picking from the four options (Strongly Agree, SA; Agree, A; Disagree, d; Strongly Disagree) with 4, 3, 2 and 1 assigned to the positively worded items respectively while scoring is reversed for negatively worded items. Moreover, section C is the World Health Organization (WHO) Quality of Life Questionnaire Scale. It comprises twenty-six questions/items about the respondent's quality of life, health, other areas of their lives and how often they experienced things in the last four weeks. All the items in this section have five options each ranging from 5-1 from left to right. Section D is Quality of Life measurement for Adolescents with Hearing Loss scale. The author/source is Washington University School of Medicine, independent studies and capstones, programme in audiology and communication sciences. It have twenty items with three options (Yes, Sometimes & No) ranging 3, 2 and 1, which will be used to determine the respondents quality of life.

## Validity and Reliability of the Instruments

To ensure the validation of the instruments, the researcher made sure that the items of the questionnaire correspond with the research questions and the objectives of the study so as to ascertain the content validity of the instruments. Reliability coefficient was determined by using Cronbach alpha with reliability 0.81.

## Method of data analysis

Data collected were analysed using Pearson product moment correlation coefficient and multiple regressions.

## Presentation of results

**Research Question 1:** What is the relationship among the independent variable-personality factors (self-esteem, gender and onset of hearing loss) and the dependent variable-perceived quality of life among adolescents with hearing impairment?

**Table 1: Summary of Pearson Product-Moment Correlation showing relationship between independent variable and dependent variable**

Independent Variable	Mode	Dependent Variable (Quality of Life) (r)
Sex	R	-.001
	sig.	.497
	N	75
Self-Esteem	R	.255
	sig.	.013
	N	75
Onset of Hearing Loss	R	-.203
	sig.	.041
	N	75

The table above revealed that there is a significant relationship between self esteem and perceived quality of life among adolescents with hearing impairment( $r = 0.255$ ;  $p < 0.05$ ). Also, onset of hearing loss has significant relationship with perceived quality of life among adolescents with hearing impairment( $r = -0.203$ ;  $p < 0.05$ ) but sex has no significant relationship with perceived quality of life among adolescents with hearing impairment( $r = -0.001$ ;  $p > 0.05$ ).

**Research Question 2:** What is the composite influence of the independent variable-personality factor (self esteem, gender and onset of hearing loss) on the dependent variable-perceived quality of life among adolescents with hearing impairment?

**Table 2: Summary of multiple regression analysis showing composite influence of independent variable on dependent variable**

Model	Sum of square	Df	Mean square	F	Sig	Remark
Regression	500.033	3	168.344			
Residual	3181.634	71	44.812	3.757	.015	significant
Total	3686.667	74				
R =0.370 R <sup>2</sup> =0.137 Adjusted R <sup>2</sup> = 0.101						

**Table 2** showed that there is a composite relationship between the independent variables and the dependent variable ( $R = 0.37$ ). This lead to the fact that the independent variables accounted for 10.1% of the total variance in the quality of life (Adjusted  $R^2 = 0.101$ ). This composite influence is also shown to be significant ( $F_{(3, 71)} = 3.757$ ;  $p < 0.05$ ). Therefore, the composite influence of independent variable-personality factors (self esteem, gender and onset of hearing loss) accounted for 14% of variation on the perceived quality of life among adolescents with hearing impairment.

**Research Question 3:** What is the relative influence of the independent variable-personality factors (self esteem, gender and onset of hearing loss) on the dependent variable (perceived quality of life among adolescents with hearing impairment)?

**Table 3: Summary of multiple regression analysis showing relative influence**

Model	Unstandardized coefficients		Standardized coefficients	T	Sig
	B	Std Error	Beta ( $\beta$ )		
(constant)	79.946	9.198		8.691	.000
Sex	5.306E-02	1.456	.004	0.036	.971
Self-Esteem	.632	.225	.318	2.809	.006
Onset of Hearing Loss	-.478	.197	-.275	-2.429	.018

Table revealed that self esteem has relative significant influence on perceived quality of life among adolescents with hearing impairment ( $\beta = 0.318$ ;  $t = 2.809$ ;  $p < 0.05$ ). Also, onset of hearing loss has significant relative influence on perceived quality of life among adolescents with hearing impairment ( $\beta = -0.275$ ;  $t = -2.429$ ;  $p < 0.05$ ) but gender has no significant relative influence on perceived quality of life among adolescents with hearing impairment ( $\beta = 0.004$ ;  $t = 0.036$ ;  $p > 0.05$ ).

### Discussion of findings

The study revealed that only the self esteem and onset of hearing loss that have significant relationship with perceived quality of life among adolescents with hearing impairment respectively while gender has no relationship with perceived quality of life among adolescents with hearing impairment. This result agrees with Okoye (1987), Meadow-Orlans (1995) opined that an adolescents self esteem will therefore (high or low) and his or her will power (strong or weak) will greatly determine how he or she perceives his or herself and quality of life. Similarly the study confirms the assertion of Mba (1995) and Ademokoya (2007) who stated that deleterious effects of a hearing loss which occurred very early in life are usually very grievous that many have ranked hearing disability as one of the most calamities that can befall a human being. The study also found a joint influence of independent variables (self esteem, onset of hearing loss and gender) on perceived quality of life among adolescents with hearing impairment is significance. This finding corroborates the finding of Ademokoya (2007), Mba (1995), Hallahan & Kauffman (1994) and Heward (2000) who al reported that hearing loss causes a significant impact upon overall quality of life. The finding negates Bat-Chava (1994) who sated that type of school has a great influence on the perceived quality of life of adolescents with hearing impairment.

The study further revealed that self esteem and onset of hearing loss both have significant relative influence on perceived quality of life among adolescents with hearing impairment but gender does not have significance influence on perceived quality of life among adolescents with hearing impairment. This finding supports Noble (1996), McKenna (2001) and Okoye (2004) who opined that the stigma attached to hearing impairment and the attitudes of others, together with one's own perceptions, the way one see him or herself, can lead to poor quality of life among hearing impaired persons.



## Conclusion

The study found that self esteem and onset of hearing loss have a relationship with the quality of life of individuals with hearing impairment. This implies that hearing impairment imposes a serious challenge on the overall psychosocial development of these set of individuals. With a low self esteem, the study revealed that perceived quality of life of adolescents with hearing impairment is affected. The study revealed that gender has no relationship with the perceived quality of life among adolescents with hearing impairment, this indicates that whether boy or girl same feelings exist among them.

## Recommendations

Based on the result of the study, it is recommended that parents should report to professionals in the field of special education or those in medical the birth emergence or the development of any sudden hearing problem to any of their wards/children for early intervention programmes formulated for such a child to minimize the effect and burden which the hearing impairment placed on the shoulder of the person suffering from it. The curriculum developer should bear in mind the presence of hearing impaired in all our schools and so should develop curriculum that is hearing impaired friendly. The school authorities should mandate every parent that comes to register their children to provide or submit the result of their child audiology test which should be used in placement and referral. The school should also make continuous audiology test of all the students a routine which will detect any new problems experience by the students and which can be nipped in the bud before it become worse.

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